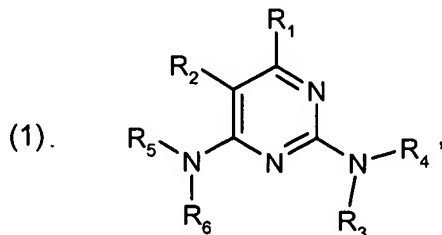


Claims 1-21 (cancelled).

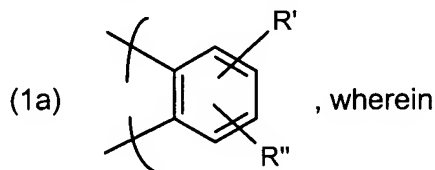
22. (new): A method for the antimicrobial treatment of a surface, which comprises contacting said surface with an antimicrobially effective amount of a 2,4-bis(alkylamino)pyrimidine of formula



wherein

R₁ is C₁-C₁₂alkyl or C₆-C₁₀aryl;

R₂ is hydrogen or C₁-C₁₂alkyl; or R₁ and R₂ together form a radical of formula



R' and R'' are each independently of the other hydrogen, C₁-C₆alkyl or C₁-C₆alkoxy;

R₃ and R₅ are each independently of the other hydrogen or C₁-C₈alkyl;

R₄ is C₁-C₂₀alkyl, unsubstituted phenyl, C₆-C₁₀aryl, C₆-C₁₀aryl-C₁-C₆alkyl, hydroxy-C₁-C₆alkyl, di-C₁-C₆alkylamino-C₁-C₆alkyl, mono-C₁-C₆alkylamino-C₁-C₆alkyl, -(CH₂)₂-(O-(CH₂)₂)₁₋₄-OH or -(CH₂)₂-(O-(CH₂)₂)₁₋₄-NH₂;

R₆ is C₁-C₂₀alkyl, C₆-C₁₀aryl, C₆-C₁₀aryl-C₁-C₆alkyl, hydroxy-C₁-C₆alkyl, di-C₁-C₆alkylamino-C₁-C₆alkyl, mono-C₁-C₆alkylamino-C₁-C₆alkyl, -(CH₂)₂-(O-(CH₂)₂)₁₋₄-OH or -(CH₂)₂-(O-(CH₂)₂)₁₋₄-NH₂; or

R₃ and R₄ and/or R₅ and R₆ together form a pyrrolidine, piperidine, hexamethyleneimine or morpholine ring.

23. (new): A method according to claim 22, wherein

R₁ is C₁-C₈alkyl or phenyl.

24. (new): A method according to claim 22, wherein

R₂ is hydrogen or C₃-C₈alkyl.

25. (new): A method according to claim 22, wherein

R₃ and R₅ are each independently of the other hydrogen or C₁-C₈alkyl.

26. (new): A method according to claim 22, wherein

R₄ is C₁-C₁₂alkyl, unsubstituted phenyl, C₆-C₁₀aryl-C₁-C₆alkyl, hydroxy-C₂-C₆alkyl, di-C₁-C₄alkylamino-C₁-C₄alkyl, mono-C₁-C₄alkylamino-C₁-C₄alkyl, -(CH₂)₂-(O-(CH₂)₂)_{1,2}-OH or -(CH₂)₂-(O-(CH₂)₂)_{1,2}-NH₂; and

R₆ is C₁-C₁₂alkyl, C₆-C₁₀aryl, C₆-C₁₀aryl-C₁-C₆alkyl, hydroxy-C₂-C₆alkyl, di-C₁-C₄alkylamino-C₁-C₄alkyl, mono-C₁-C₄alkylamino-C₁-C₄alkyl, -(CH₂)₂-(O-(CH₂)₂)_{1,2}-OH or -(CH₂)₂-(O-(CH₂)₂)_{1,2}-NH₂.

27. (new): A method according to claim 22, wherein

R₁ is C₁-C₈alkyl or phenyl;

R₂ is hydrogen or hexyl; and

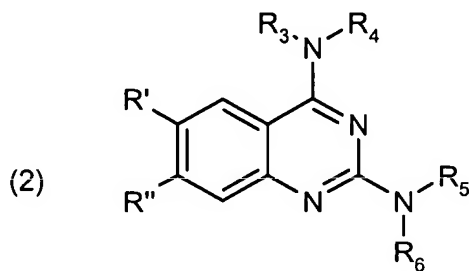
R₃ and R₅ are each independently of the other hydrogen or C₁-C₈alkyl;

R₄ is C₁-C₁₂alkyl, unsubstituted phenyl, C₆-C₁₀aryl-C₁-C₆alkyl, hydroxy-C₂-C₆alkyl, di-C₁-C₄alkylamino-C₁-C₄alkyl, mono-C₁-C₄alkylamino-C₁-C₄alkyl, -(CH₂)₂-(O-(CH₂)₂)_{1,2}-OH or -(CH₂)₂-(O-(CH₂)₂)_{1,2}-NH₂; and

R₆ is C₁-C₁₂alkyl, C₆-C₁₀aryl, C₆-C₁₀aryl-C₁-C₆alkyl, hydroxy-C₂-C₆alkyl, di-C₁-C₄alkylamino-C₁-C₄alkyl, mono-C₁-C₄alkylamino-C₁-C₄alkyl, -(CH₂)₂-(O-(CH₂)₂)_{1,2}-OH or -(CH₂)₂-(O-(CH₂)₂)_{1,2}-NH₂; or

R₃ and R₄ and/or R₅ and R₆ together form a pyrrolidine, piperidine, hexamethyleneimine or morpholine ring.

28. (new): A method according to claim 22, relating to compounds of formula



wherein

R' is hydrogen, C₁-C₃alkyl or C₁-C₃alkoxy;

R'' is C₁-C₃alkyl or C₁-C₃alkoxy;

R₃ and R₅ are each independently of the other hydrogen or C₁-C₈alkyl; and

R₄ and R₆ are each independently of the other C₁-C₁₂alkyl, phenyl-C₁-C₃alkyl, hydroxy-C₁-C₆-alkyl, di-C₁-C₆alkylamino-C₁-C₆alkyl, mono-C₁-C₆alkylamino-C₁-C₆alkyl, -(CH₂)₂-(O-(CH₂)₂)_{1,4}-OH or -(CH₂)₂-(O-(CH₂)₂)_{1,4}-NH₂; or

R₃ and R₄ and/or R₅ and R₆ together form a pyrrolidine, piperidine, hexamethyleneimine or morpholine ring.

29. (new): A method according to claim 22, wherein

R₁ is C₁-C₄alkyl or phenyl;

R₂ is hydrogen or hexyl; or R₁ and R₂ together form a radical of formula (1a) as defined in claim 22, wherein

R' is hydrogen, C₁-C₃alkyl or C₁-C₃alkoxy, and

R'' is C₁-C₃alkyl or C₁-C₃alkoxy;

R₃ and R₅ are each independently of the other hydrogen or C₁-C₈alkyl;

R₄ is C₁-C₁₂alkyl, unsubstituted phenyl, C₆-C₁₀aryl-C₁-C₆alkyl, hydroxy-C₂-C₆alkyl, di-C₁-C₄alkylamino-C₁-C₄alkyl, mono-C₁-C₄alkylamino-C₁-C₄alkyl, -(CH₂)₂-(O-(CH₂)₂)_{1,2}-OH or -(CH₂)₂-(O-(CH₂)₂)_{1,2}-NH₂; and

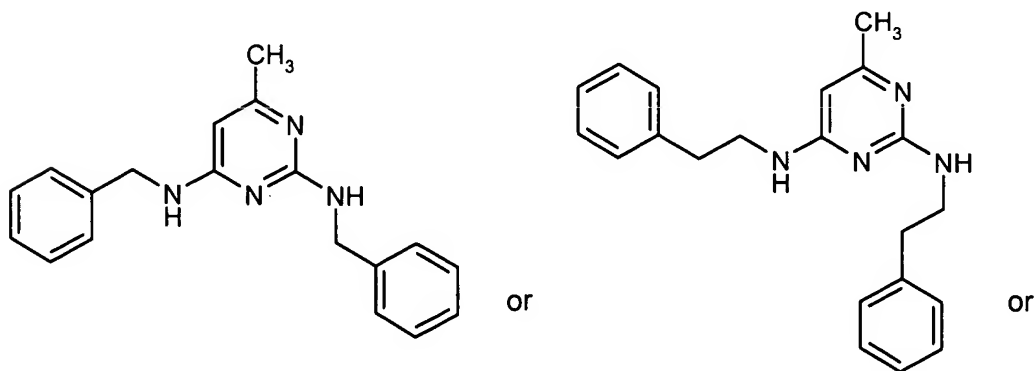
R₆ is C₁-C₁₂alkyl, C₆-C₁₀aryl, C₆-C₁₀aryl-C₁-C₆alkyl, hydroxy-C₂-C₆alkyl, di-C₁-C₄alkylamino-C₁-C₄alkyl, mono-C₁-C₄alkylamino-C₁-C₄alkyl, -(CH₂)₂-(O-(CH₂)₂)_{1,2}-OH or -(CH₂)₂-(O-(CH₂)₂)_{1,2}-NH₂; or

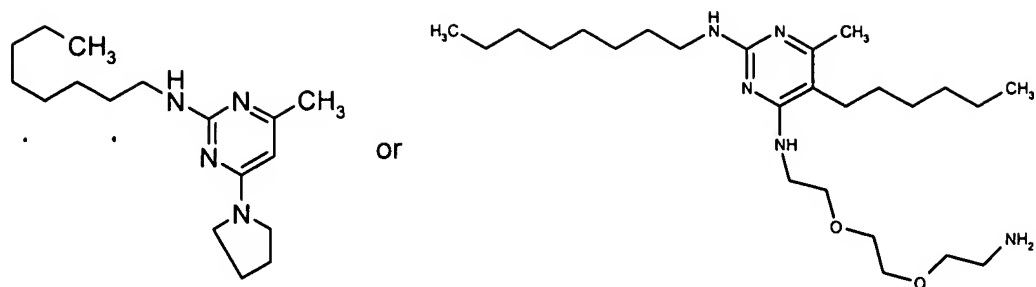
R₃ and R₄ together, and R₅ and R₆ together, form a pyrrolidine, piperidine, hexamethyleneimine or morpholine ring.

30. (new): A method according to claim 22, wherein

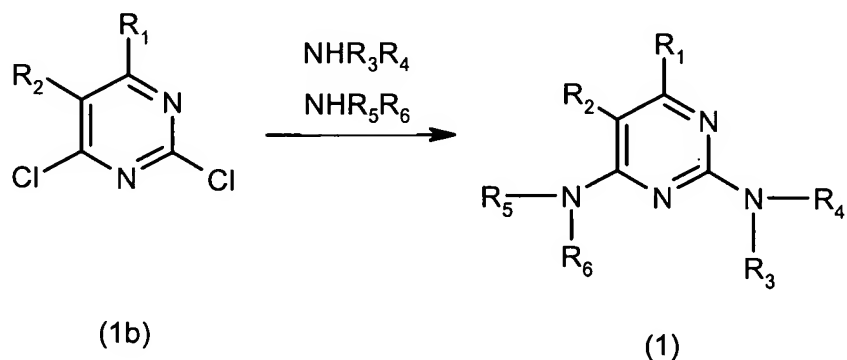
R₃ and R₅, and R₄ and R₆, have the same meanings.

31. (new): A method according to claim 22, wherein the 2,4-bis(alkylamino)pyrimidine is of the formula



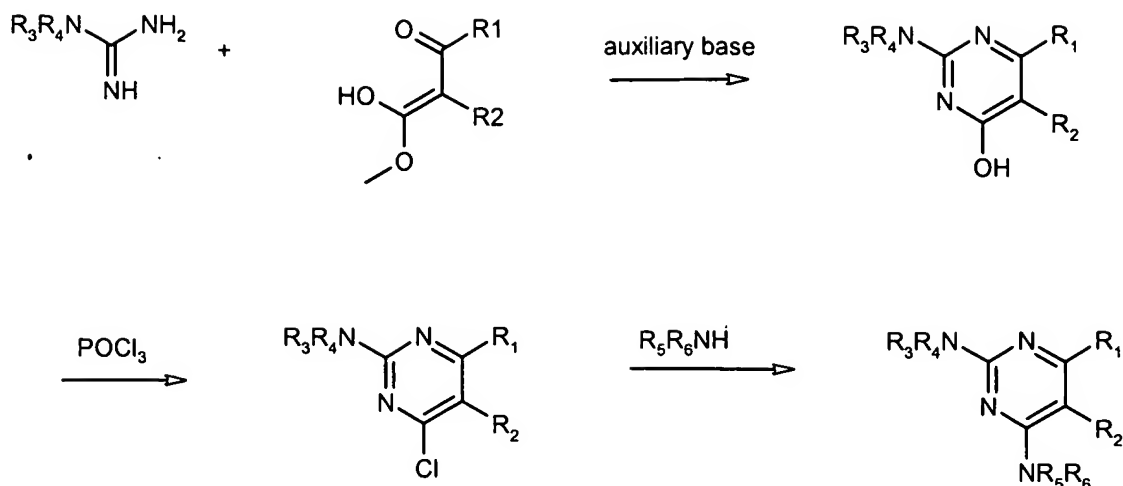


32. A process for the preparation of a compound of formula (1) according to claim 22, which comprises reacting a dichloropyrimidine compound of formula (1b), wherein R_1 and R_2 are as defined in claim 22, with a primary or secondary amine, wherein R_3 , R_4 , R_5 and R_6 are as defined above in claim 22, in a suitable solvent and an auxiliary base or using an excess of amine to form a compound of formula (1) according to the following Scheme:



or

a process for the preparation of a compound of formula (1), which comprises condensing a guanidine compound with a suitable β -keto ester using an auxiliary base in the presence of a solvent and then reacting with phosphorus oxychloride, and then with a primary or secondary amine (R_4R_5NH) according to Scheme (II):



wherein R₁ and R₂, R₃, R₄, R₅ and R₆ are as defined above in claim 22.

33. (new): A method according to claim 22, wherein the surface comprises textile fibre materials.

34. (new): A method according to claim 22, wherein the treatment with a compound of formula (1) results in preservation.

35. (new): A method according to claim 22, wherein a compound of formula (1) is incorporated into washing and cleaning formulations.

36. (new): A method according to claim 22 wherein a compound of formula (1) imparts antimicrobial properties to, and preserves, plastics, paper, nonwovens, wood or leather.

37. (new): A method according to claim 22, wherein a compound of formula (1) imparts antimicrobial properties to, and preserves, technical products selected from printing ink thickeners consisting of starch or of cellulose derivatives, surface-coating compositions and paints.

38. (new): A method according to claim 22, wherein a compound of formula (1) functions as a biocide in technical processes.

39. (new): A method according to claim 22, wherein a compound of formula (1) is incorporated into a skin-care preparation or mouth-care preparation.

40. A personal care preparation containing from 0.01 to 15 % by weight, based on the total weight of the composition, of a compound of formula (1) according to claim 22 and a cosmetically tolerable adjuvant.

41. An oral composition containing from 0.01 to 15 % by weight, based on the total weight of the composition, of a compound of formula (1) according to claim 22 and an orally tolerable adjuvant.

42. A skin-care preparation containing from 0.01 to 15 % by weight, based on the total weight of the composition, of a compound of formula (1) according to claim 22 and adjuvants tolerated by the skin.